Before the
Federal Communications Commission
Washington, D.C. 20554

In the matter of	)	WT Docket No. 11-49
	)	
Request by Progeny LMS, LLC for Waiver of Certain Multilateration Location and Monitoring Service Rules	)	FCC 13-78
	)	
and	)	
	)	
Progeny LMS, LCC Demonstration of Compliance with Section 90.353(d) of the Commission's Rules	)	

SKYTEL'S REPLY TO THE OPPOSITION OF PROGENY LMS, LLC TO SKYTEL'S PETITION FOR RECONSIDERATION, AND PETITION TO DENY

Skybridge Spectrum Foundation ("SSF" or "Skybridge"), Warren Havens ("Havens"), V2G LLC, Telesaurus Holdings GB LLC, Intelligent Transportation & Monitoring Wireless LLC, Environmentel LLC, Environmentel-2 LLC, and Verde Systems LLC (collectively "Petitioners" or "SkyTel") hereby file this Reply to the Opposition of Progeny LMS, LLC dated July 19, 2013 ("Opposition") to SkyTel's Petition for Reconsideration and Petition to Deny ("Petition") the Commission's Order, FCC 13-78, released on June 6, 2013 (the "Order" or "2013 Order").

INTRODUCTION AND SUMMARY

To avoid making an arbitrary or capricious decision under the Administrative Procedure Act, 5 U.S.C. § 706(2)(A), the Commission must examine the relevant data and articulate a satisfactory explanation for its action, including a "rational connection between the facts found and the choice made." *Kristin Brooks Hope Center v. FCC*, 626 F.3d 586, 588 (D.C. Cir. 2010) (declaring arbitrary and capricious the FCC's failure to provide a reasonable explanation connecting relevant facts to its decision to permanently reassign toll-free hotline numbers), *citing*

Burlington Truck Lines v. United States, 371 U.S. 156, 168 (1962); *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983)). The agency's explanation cannot "run [counter] to the evidence," and it must "enable us to conclude that the [agency's action] was the product of reasoned decisionmaking." *Kristin Brooks*, 626 F.3d at 588 (citing *State Farm*, 463 U.S. at 52); *see also Verizon Tel. Cos. v. FCC*, 570 F.3d 294, 302 (D.C. Cir. 2008) (invalidating an FCC order denying petitions for forbearance from its unbundling obligations because the Commission acted arbitrarily and capriciously by relying exclusively on a market share test that was inconsistent with FCC precedent and by failing to provide a reasoned explanation for its departure from precedent).

The Order does not include a rational connection between the facts found and the choice made. The Commission allowed Progeny to "commence commercial operations of its position location service network" based on Progeny's own field test results and the Commission's finding, *see* Order at ¶ 1, that Progeny's planned commercial operations will not cause "unacceptable levels of interference" to unlicensed devices operating under Part 15 of the Commission's rules in the 902-928 MHz band. Among its other defects, however, the Order does not define "unacceptable levels of interference."[1] Against this vague, even nonexistent baseline, Progeny's field tests are highly suspect (for this reason alone). The Commission could not and did not make a rational connection between the facts it found and the choice it made.

Despite its length, nothing in Progeny's Opposition supplies the missing rational connection between the facts found and the FCC's decision to allow Progeny to commence commercial operation of its multilateration location and monitoring service (M-LMS). Rather, Progeny's Opposition is a conclusory rehash of the Order. The Opposition fails to address or

[1] Nor does it address other defects presented the Petition as to the ITS purpose of M-LMS (the standard in any waiver grant) and the related requirement to test in a mobile, vehicular environment, as well as the issues as to threshold qualifications of Progeny to hold the subject licenses which had been presented by Petitioners to the FCC including for purposes decided in the Order.

explain the Order's lack of reasoned decisionmaking.

For the reasons noted in SkyTel's Petition, the Commission should reconsider its Order, and deny Progeny authorization to operate on any basis other than that prescribed by the Commission's Rules governing M-LMS. The many petitions for reconsideration ("Recons")—six, as cited in footnote 2 of Progeny's Opposition —underscores the need for reconsideration. [2]

At the outset, the Order cannot be construed as authority for Progeny to use M-LMS spectrum for any purpose other than the location technology and systems described in its limited tests (which did not use much of the M-LMS spectrum licensed to Progeny).

To the substantial degree that the Opposition did not deal with aspects of the Petition, or not in any direct meaningful way, we do not need to and do not Reply here. It is apparent that Progeny largely avoids some of the harder threshold challenges in the Petition, responding mostly on the debate in the proceeding that occupies most Progeny's and other, non-Skytel parties' interests, the vague interference standard and related testing.

To the degree that Skytel indicates herein that Progeny (and any other M-LMS licensees) have duties to test and minimize interference to Part 15 devices and systems, we do not mean to expand in any way specific FCC statements on these matters in devising the current rules. However, as noted in our Petition, there is no meaning to this if the purpose of M-LMS is evaded,

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[2] However, to reiterate our past position: While Petitioners agree with some of the points in other parties' Recons (e.g., as to inadequate testing), the other Recons lack candor and are defective in that they avoid the ITS purpose of M-LMS and also suggest that users of Part 15 devices have vested rights, and legal standing, in the 902-928 MHz band: They do not, and the FCC has been clear on that for decades. Those positions and suggestions undermine their case for maintaining substantial use, including the "safe harbor" rule, under the current M-LMS rules by those irresponsible and evasive positions. They should support use of M-LMS for ITS purposes, for the public interest involved (which ultimately is the sole standard for use of radio frequencies in the Communications Act) but also since ITS wireless supports smart energy and other purposes that most, if not all, of these other parties are involved with. They miss the forest for the trees. Petitioners have presented the opportunities in past filings before the FCC related to M-LMS in various dockets, in direct presentations (to many utility companies) and in the broader market (e.g, smart transport and smart energy are increasingly related and integrated, and advanced wireless may serve both).

as Progeny has done and the Order has allowed, including by not testing in the ITS environment (moving vehicles in the type of traffic for which LMS is meant to provide remedies) and not in any way even stating that any ITS application will be served. Indeed, Progeny and the FCC appear unaware and unconcerned with ITS entirely.

Further, by discussing "unacceptable levels of interference" and the like, we do not mean that the subject rules and standards are clear, and provide reasonable means for the subject testing. Indeed, our position is that they are overly vague. However, Progeny and the Order assert or assume these are sufficiently clear, and have built their arguments and conclusions on that basis. In challenging, we use these terms as meant or implied by Progeny and the FCC.

I. THE SKYTEL PETITIONERS HAVE STANDING

Progeny argues that Havens and his associated companies do not have standing in these proceedings. In support of its assertion, Progeny merely states that "Havens does not claim to manufacture or operate Part 15 devices in the 902-928 MHz band and the M-LMS licenses that he does hold permit operations in other portions of the band that are not co-frequency with Progeny's spectrum." According to Progeny, "the interests of administrative efficiency," standing alone, justify "dismiss[al] [of] Havens' petition on this basis."

Progeny's assertions are as absurd as they are unsupported. Not surprisingly, Progeny provides *no* legal support for its assertions — because it cannot. Progeny cites no case, rule or order holding that only co-channel licensees have standing before the Commission. The elements of standing are the following: (1) injury in fact; (2) causation; and (3) redressability. *American Library Ass'n v. FCC*, 406 F.3d 689, 696 (D.C. Cir. 2005) (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992)). Progeny does not address or discuss, even in passing, the elements of standing.

"With regard to the injury-in-fact prong of the standing test, petitioners need not prove the merits of their case in order to demonstrate that they have Article III standing." *American Library*, 406 F.3d at 696. "Rather, in order to establish injury in fact, petitioners must show that there is a substantial probability that the FCC's order will harm the concrete and particularized interests of at least one of their members." *Id.* Once injury in fact is shown, the other two elements automatically fall into place. *Id.*

Petitioners have demonstrated — and Progeny acknowledges — that the SkyTel companies are also M-LMS licensees. Indeed, *denying* standing to Havens and his companies would undermine the intrinsic purpose of M-LMS as a service dedicated to vehicles and to intelligent transportation systems. Allowing Progeny to operate on any basis besides that specified by the Commission's rules governing M-LMS would decidedly impair the interests of *all* M-LMS licensees, without regard to those licensees' specific location within M-LMS spectrum. Granting an open-ended waiver of those rules to Progeny as one M-LMS licensee impairs the ability of other M-LMS licensees to conduct business in accordance with the Commission's rules. This alone undoubtedly satisfies the first and subsequent prongs of the elements of standing for Havens and his companies in these proceedings.

Further, Warren Havens,[3] a SkyTel component party, competed with Progeny in the FCC auction leading to grant of the Progeny M-LMS licenses, and the Petition is a challenge of grant of those licenses in this competition. This also creates legal standing. In addition, M-LMS rules were devised to established competition among the M-LMS A-block licensee, and the M-LMS C block (or B and C block) licensee, by the spectrum cap limiting M-LMS spectrum held by one

[3] Mr. Havens later assigned his M-LMS licenses to Telesaurus Holdings GB LLC, and thereafter this LLC assigned some of the spectrum to Skybridge Spectrum Foundation.

licensee in a market to 8 MHz.[4] The threshold competition is: the FCC regulatory framework by which the competitors may compete, and where one competitor seeks changes in that, the other competitor has legal standing to challenge. SkyTel's challenge is properly focused, emphatically, on the ITS purpose of LMS and the current M-LMS rules that can only be waived if the waiver furthers that purpose more than strict application of the rule. The Order failed in this regard and the Petition presented.[5]

II. PROGENY FAILED TO ADDRESS CRITICAL ADMINISTRATIVE PROCEDURE ACT ISSUES

Progeny evidently argues that since the Commission granted waivers to which Progeny deems itself entitled, the Commission therefore could not have engaged in any arbitrary or capricious decisionmaking. The only support Progeny proffers in support of the Commission's decision is repetition of language of the Commission's Order. Progeny's Opposition offers no meaningful response to SkyTel's extensive consideration of federal administrative law and the specific elements of Commission's decision. In an apparent feint or slight of hand, Progeny focuses exclusively on Part 15 devices and its repetition of the Commission's conclusion that any interference by Progeny's NextNav system with such devices is acceptable under the Commission's rules. Progeny's diversionary tactic cannot conceal its failure to give meaningful

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[4] See §§ 90.353(f), and 90.209(b) FN 4 to table ("…The maximum authorized bandwidth for multilateration LMS operations shall be... 8.00 MHz if the 919.75-921.75 MHz and 921.75-927.25 MHz bands and their associated 927.25-927.50 MHz and 927.50-927.75 MHz narrowband forward links are aggregated.")

[5] The FCC also previously found that SkyTel can challenge Progeny, including in finding several times that their presentation on the threshold "qualification" issues (indicated herein above and further in the Petition) may be further pursued and were not prejudiced by past FCC decisions granting certain relief to Progeny (e.g., construction deadline extension relief). Petitioners did just that in the subject Petition. See *Order*, DA 11-2036, 2011, FN 99 (..." [T]he relief granted Progeny in this order is without prejudice to Havens' allegations concerning Progeny's status as an M-LMS licensee. See Requests of Progeny LMS, LLC and PCS Partners, L.P. for Waiver of Multilateration Location and Monitoring Service Construction Rules, Order, 23 FCC Rcd 17250, 17259 ¶ 28 (WTB 2008).") If "Havens" (the Skytel parties) had no legal standing to pursue said allegations, then the FCC would not have issued this statement. Progeny did not appeal or dispute this part of these Orders, and cannot credibly do so at this time.

attention, if any at all, to interference with other M-LMS licensees, such as SkyTel.

In its Opposition, Progeny failed altogether to address the legal objections raised by SkyTel in its Petition for Reconsideration. In response to petitioners' argument that the FCC's test of "unacceptable levels of interference" was potentially void for vagueness, Progeny merely stated that the test was not vague, simply because the Commission said so. Petitioners stated that there was a logical disconnect between the supposed purpose of Progeny's test and the FCC's actual test that "unacceptable levels of interference" will not occur. Progeny denied this defect, again on the basis of the Commission's contrary conclusion. Petitioners stated that the FCC's *Waiver Order* and *Commercial Operations Order* were not supported by reasoned decisionmaking and substantial evidence because they ignored the fundamental purpose of LMS and misstated the meaning of the Commission's rules. Once again, Progeny defended the Commission's Orders on the sole ground that they represented the solemn word of the Commission. In response to petitioners' objections to the FCC's finding that "Progeny's M-LMS system (technology and system) has been designed in a manner that reasonably minimizes the potential for interference to Part 15 operations," Progeny denied any problems because the Commission had found none. Finally, when Petitioners questioned the FCC's failure to sufficiently explain its decision to attach greater significance to Progeny's evidence, rather than conflicting evidence articulated by SkyTel, Progeny urged the Commission to rubber-stamp its grant of a limited waiver to Progeny on the conclusory basis that anything Petitioners had to offer was irrelevant and should be ignored. For all its rhetoric and its obsequious defense of Commission decisionmaking, Progeny's Opposition lacked any meaningful legal or factual discussion.

Certain interference with systems of Part 15 devices is a part of the Commission's rules governing M-LMS. *See* 47 C.F.R. § 90.353(d). Petitioners have the clear right to demand that the Commission conduct any examination according to legal requirements of sound, reasoned

decisionmaking. The FCC must take care not to act arbitrarily or capriciously in its interpretation of the Communications Act and its own rules. Progeny's Opposition provides no basis for evaluating the Commission's compliance with administrative law norms governing the principled formulation of regulatory policy.

III. EXPERT AGENCY DECISIONS MUST BE BASED ON REASONED DECISIONMAKING

Progeny expends considerable effort in defense of the FCC's interpretation and application of complex technical rules. To warrant deference to its discretionary judgments as acts grounded in expertise rather than politically motivated caprice, an agency must make reasoned decisions based on the facts known to it. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43, (1983); *Kristin Brooks Hope Center v. FCC*, 626 F.3d 586, 588 (D.C. Cir. 2010). Agency claims to expertise, however, warrant no deference when their decisions lack substantial basis in logic or fact. Indeed, Progeny's reliance upon *State Farm* is misplaced. In that case, the Supreme Court held that the National Highway Traffic Safety Administration's (NHTSA) rescission of the passive restraint requirement was arbitrary and capricious because it failed to present an adequate basis and explanation for rescinding the requirement. *State Farm*, 463 U.S. at 30. Similarly, the Commission here has failed to present an adequate basis and explanation for allowing Progeny to proceed with commercial operation of its so-called wide-area positioning system (WAPS) over M-LMS spectrum. As in *State Farm*, the agency's decision is arbitrary and capricious.

Progeny's Opposition to the technical aspects of SkyTel's Petition fails to adequately address the many defects with the Order as noted in the Petition.[6] Progeny's claims that the

[6]As discussed in detail in the Petition, the FCC's test of "unacceptable levels of interference" is potentially void for vagueness. Progeny's test does not demonstrate that "unacceptable levels of interference" will not occur. That test therefore fails to satisfy the conditions imposed by the Commissions orders and regulations governing M-LMS. Moreover, the FCC's finding that "Progeny's M-LMS system has been designed in a manner that reasonably minimizes the

Commission has previously addressed Petitioners' arguments and that they are irrelevant are belied by the facts. As noted below, Progeny failed to substantively and adequately address the Order's defects as noted in the Petition.

A. The Commission Improperly Withheld Progeny Data from Public Disclosure

The Commission improperly withheld Progeny's submission of confidential test data between its WAPS System and Part 15 devices from public disclosure. Petition at 29. Yet Progeny did not address Petitioner's lack of disclosure arguments in its Opposition,[7] other than to state that proprietary information (not test results) had been used in testing the design and operation of certain Part 15 equipment that was subjected to tests, and that confidential treatment was appropriate for such information. Opposition at 63. But the design and operation of the Part 15 equipment that was subjected to the tests *is critical to understanding the test results.* Without such critical information, the public and competitors were deprived of their ability to understand the data and assumptions that produced Progeny's test results, much less the basis by which the Commission authorized commercial operation of Progeny's WAPS system. Accordingly, the Commission reached its conclusion without proper public disclosure of facts that deprived the public and competitors of their ability to fully contribute to create a complete record.

B. The Commission's "No Unacceptable Levels of Interference" Findings Are Arbitrary and Capricious

There is no conclusive evidence demonstrating that Progeny's M-LMS system will not cause unacceptable levels of interference to Part 15 devices consistent with the Commission's

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potential for interference to Part 15 operations" raises serious Administrative Procedure Act issues. The Commission did not sufficiently explain why it attached greater significance to Progeny's evidence, rather than conflicting evidence articulated by SkyTel. Petition at 6-14, 20-39. Moreover, the Commission's failure to consider new evidence of the bad acts of Progeny's Agents in connection with Auction 21 undermines the Order, inasmuch as it grants regulatory flexibility to a party whose basic qualifications as a licensee should be questioned. Petition at 14.

[7] Progeny therefore waived its opposition as to almost all of Petitioners' public disclosure arguments. *See* 47 C.F.R. 1.106(g).

rules that have not been waived.[8] Petitioners seek strictly to have the current rules enforced; they are not seeking the application of different rules or a higher standard as Progeny suggests in its Opposition.

In addition to the noted defects in Progeny's field tests, including the markets and devices tested, the Order and the record are devoid of any clarification of what is an unacceptable interference level. No definition of "unacceptable levels of interference" exists, and "no uniform field testing method is appropriate considering the great array of devices that the Part 15 industry deploys in the 902-928 MHz, which are designed to address different needs and thus have no common design."[9] The Commission's "no unacceptable levels of interference" finding is therefore tenuous at best. It clearly does not represent reasoned, fact-based decisionmaking.

The Commission concluded that Progeny's system is not "causing any significant impact upon Part 15 operations in the 902-928 MHz band" based on tests in the San Francisco Bay Area and 39 other markets. But the Order also acknowledged that it is difficult to identify or trace interference to a particular source. Order at ¶16. By its own confession, the Commission does not really know the extent to which Progeny caused interference in the tested areas. Moreover, the Commission's findings shed no light on areas beyond the tested markets, or with respect to Part 15 devices beyond those tested.

Progeny's Opposition responds that its testing in Santa Clara was intended to capture the "vibrant and complex conditions of a very noisy environment." Opposition at 62. This assertion ignores the unique characteristics of hundreds of other markets that may have adversely affected

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[8] 47 C.F.R. § 90.353(d) requires that Progeny demonstrate through actual field tests that its M-LMS system will not cause unacceptable levels of interference to Part 15 devices: "Additionally, EA multilateration LMS licenses will be conditioned upon the licensee's ability to demonstrate through actual field tests that their systems do not cause unacceptable levels of interference to 47 CFR part 15 devices."

[9] Order, ¶ 18. Progeny acknowledged in its Opposition that the Commission adopted no "Bright Line" standard. Opposition at 11.

the test results.[10] For reasons noted in the Petition at 22-28, Progeny did not satisfy the interference standards articulated in the Commission's rules.

C. The Commission Should Reject Progeny's Conclusory Arguments

Progeny in its Opposition largely refers to the Order's conclusions that the interference standard is met, Opposition at 14, without adequately addressing or refuting Petitioner's specific arguments. For example, Progeny's Opposition at page 24 begs the question by referring to the FCC Order conclusions and findings rather than actually responding to the merits of Petitioner's argument that the FCC lacked reasoned decision-making because it focused solely on Progeny's efforts to design *its network* to minimize interference to Part 15 devices, rather than actually demonstrating that unacceptable levels of interference will not occur. Demonstrating that unacceptable levels of interference will not occur is precisely what the FCC's rules require, but the FCC's findings on this point are unsupported.

Nor does Progeny adequately justify in its Opposition the FCC's stated purpose of the field test "to minimize, not eliminate, the potential for M-LMS interference to Part 15 operations overall so that the band can continue to be used for unlicensed operations without significant detrimental impact, consistent with their Part 15 status." Order ¶ 19. As noted in the Petition, even the most extensive efforts to minimize interference could fail, resulting in continuing levels of interference that are "unacceptable" despite the test results. Contrary to Progeny's claims in its Opposition, Petitioner's argument is not "an untimely challenge to the Commission's adoption of its unacceptable levels of interference standard" but rather a demonstration of the strained logic in a failed attempt to satisfy and explain how the FCC satisfied the *current*

[10] And as noted in the Petition and above, not testing in vehicles is a fatal defect by itself. The waivers granted to Progeny were subject to the testing, and also did not waive the requirement to serve vehicles. If the FCC did not appear assiduously deaf to the purpose of this entire radio service, ITS, we would repeat this further, and cite extensively from the legislative intent of these rules, and ITS literature for the US and international markets. But unless and until the FCC decides to consider ITS, the purpose of this radio service, we have made this point sufficiently and expanding on it further does not appear useful.

standard as articulated in 47 C.F.R. § 90.353(d).

Moreover, Progeny's explanation that the FCC found that Progeny both designed its system to minimize interference to Part 15 devices and conducted tests that demonstrated that unacceptable levels of interference will not occur, Opposition at 60, begs the question of what level of interference is unacceptable *despite* Progeny's design and test results.

In its Opposition, Progeny also failed to defend the FCC's failure to adequately explain why the Commission rejected the evidence and assertions presented by the SkyTel entities, in favor of those made by Progeny, including Progeny's purported use of four megahertz to provide its location service, rather than on the full eight megahertz authorized by Progeny's license. Progeny again begs the question in its Opposition, merely stating that because the results were documented in the field tests that were conducted, "it was unnecessary to verify this fact." *Compare* Opposition at 61 *with* Petition at 12. Such unverified facts are not the basis of reasoned decision-making. *See State Farm*, 463 U.S. at 43; *Kristin Brooks*, 626 F.3d at 588.

Nor did Progeny adequately address in its Opposition the demonstrated superiority of other technologies compared to Progeny's technology, thereby casting further doubt on the FCC's logic and reasoning. *Compare* Petition at 14 *with* Opposition at 60. While it is true, as Progeny posits, that the Commission's rules for M-LMS do not mandate the use of a single type of modulation technology, the Commission must nevertheless explain the basis for its decisions. In this proceeding, the Commission has failed to discharge this duty.

Conclusion

For the foregoing reasons and those stated in the Petition, the Commission should reconsider its Order, and deny Progeny's authorization to operate on any basis other than that prescribed by the Commission's Rules governing M-LMS.

Respectfully submitted,

/s/ [Filed electronically]

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CERTIFICATE OF SERVICE

I, Warren Havens, certify that I have, on August 2, 2013, served by placing into the USPS mail system with first-class prepaid postage affixed, unless otherwise noted, a copy of the foregoing filing to the following:

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